

Process Redesign Is Key to Successful IT Deployment



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“If you take care of all the little things, you’ll never have a big thing to worry about.”

Cal Ripkin, Sr.

The first two articles in this series focused on the important role of leadership and governance along with change management as essential first steps in deploying health information technology. Now, we will focus on the critical steps related to process redesign—a task that if neglected, will lead to failure in the deployment of technology.

Health care delivery represents one of the most complex series of activities of any industry. While there are frequently references to banking, as an example, and the highly electronic nature of that industry in today’s world, the activities are not nearly as complex as in the care delivery patterns of most hospitals.

It is the handoffs in health care where value, efficiency and effectiveness are derived. Therefore, attention to the handoffs through the implementation of an effective approach to process redesign will yield the best results.

There are several steps that are part of the process redesign model that we have found to be critical for fostering safe and effective patient care.

First, from our perspective, process redesign must be clinically led. The involvement of physicians, nurses,

pharmacists, social workers and other clinical members of the organization working together as a team in a multi-disciplinary fashion is important. While this approach takes additional time and resources, we have found that, if this approach is taken, success is much more likely.

It is important to conduct a thorough assessment of the current state of the organization. A current state assessment provides the organization an opportunity to determine clinician needs and expectations related to the project.

A comprehensive current state review also has the added advantage of engaging stakeholders across the board in the organization and aligning them with the organization’s overall business strategy. Specifically, a comprehensive current state assessment includes the following activities:

Governance assessment

Effective governance represents an essential precursor for any successful project. We recommend that the organization establish a steering group that will provide oversight responsibility for the process redesign portion of the project. The governance assessment is a preparatory step that gathers documentation on the current governance mission, goals, structures, membership, roles, and responsibilities for guiding the efforts of the transformation initiative. The governance assessment also outlines the future state for these same areas. Gaps between the current and future state are identified and an action plan is created to close identified gaps.

Likewise, a similar assessment must be conducted by the organization on physician governance strategy, goals, objectives, structure, function and critical success factors. Active involvement of the organization’s physician executives, the chief medical information officer (CMIO), or the equivalent, as well as selected physician advisory group members—which includes sponsors and champions—is important.

Over the last several years, we have become increasingly convinced that a designated CMIO represents an important investment that the organization should make for fostering effective results.

Environmental assessment

The environmental assessment requires a formal review of the organization's people, process and technology culminating in an organizational change management plan. Barriers to implementation and tactics for overcoming these barriers are outlined in the same way that gaps are mitigated or closed as the initiative moves forward.

A secondary outcome of the environmental assessment is a readiness review summary. The readiness review outlines all of the various issues related to the "readiness" of the organization for moving forward with process redesign.

For example, the assessment of physician readiness is a key indicator of whether or not these critical participants recognize the depth of change in workflow that will be required to accommodate successful implementation of the health information system.

Stakeholder analysis

Representative stakeholders are identified from each of the organization's departments or groups (e.g., administrative team, business office, patient access, nursing, medical staff, pharmacy, social services and other ancillary departments, among others).

Generally, we have found that in-depth interviews with key stakeholders along with surveys of others throughout the organization are a useful approach in creating a stakeholder assessment. The outcome is an executive summary of readiness.

It is important to recognize that the stakeholder analysis is not a singular activity, but rather an ongoing process that will occur periodically over the course of the care transformation initiative.

Stakeholders should include both individuals who are initially identified as being supportive and critics of the



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original implementation plans in order to mitigate the risks that occur within most groups of clinical constituents.

Risk management process

The risk management process is used to protect the assets of the institution. An overall risk analysis and gap assessment is completed, during which all project components are reviewed to identify any weaknesses, problems and gaps. A plan to mitigate the risks and gaps identified is then prepared to address the identified issues.

These initial assessments are crucial first steps in preparing for an

effective workflow and process redesign. While time is required for this work, it allows the project team to prepare a foundation that can be used by management and physician leaders as they move forward with the overall initiative.

Again, in our experience, the time invested up front in preparing the organization for process redesign is as important as the investment in the overall redesign effort.

Design

As the organization moves forward with the actual redesign effort, it will be important to engage in a vision

clarification process. Clarity of vision is a preventive measure for insuring the ultimate success of the initiative.

Therefore, it is wise to consider periodic reassessments of the vision over the course of the project. With these steps now completed, the organization is ready to move forward with process redesign.

High-level workflows

Part of the problem in moving from a paper-based approach to an electronic health information management relates to the many "subterranean processes" that permeate health care organizations.

It is not uncommon for clinicians throughout the organization to hold companion records and information that may or may not eventually be entered into the record system.

An electronic record system does not accommodate such a loose definition of the record. As a result, a comprehensive current state workflow is a key step in identifying all workflow patterns of the institution.

Once the current state workflows are completed they are then used to identify areas of potential process improvement that could result from the initiative. If existing workflows have previously been documented it is important to validate them through a series of workshops to gain consensus on a multi-disciplinary basis.

The primary reason for this step is to facilitate interaction among the disciplines. In our experience, one of the major problems with workflow analysis is that it is too often completed on a disciplinary basis and, therefore, misses critical requirements that may be different among the various participants in the workflow.

Review of multi-departmental workflows, such as medication management, will yield areas for further focus as the impact on the nursing, lab, pharmacy clinicians, and other involved in the care delivery process become clear.

The added amount of time required for the approach we are suggesting often prevents delays and implementation problems for the organization further down the road.

In addition, clear documentation of the current workflows allows the leadership team to define more clearly the potential ROI benefits that can be anticipated during the implementation phase of the project.

Failure mode, effects analysis (FMEA)

We recommend that a FMEA be conducted on high impact, current processes. Essentially, a FMEA considers the potential failure points in a workflow process and assigns scores based on the impact of the failure, the incidence or volume of the potential failure, and the ability to discover the failure. Working sessions are then conducted with end-users who hold an in-depth knowledge on the details of the selected processes.

The FMEA scores for the processes are then compared to the proposed future processes to determine the level of impact for the process redesign effort. The results of the FMEA frequently will guide the organization's decisions as it moves forward.

Since this approach is helpful with critical workflow analysis, it is a particularly important part of the overall project and, again, entails a multi-disciplinary approach.

Future design

Once the workflow and FMEA analysis are completed, the project team can then begin to engage clinicians in sessions designed to define the "ideal" future for the organization. The ideal workshops should be coordinated to include maximum participation from throughout the organization.

It is important at this stage of the project to not be constrained by any pre-existing conditions or decisions related to a specific technology platform that will be used in support-

ing the transformation initiative.

It is these discussions that will serve as the guide to the organization for selecting the appropriate system based on the future design, which is an important element in gaining support for the overall transformation effort.

We have found that, by allowing participants to clearly articulate their "desired" future and engage in debate on the merits and demerits of the ideal, support for the project is engendered among the clinicians.

Optimize

The final step of an ideal workflow redesign process is to "optimize" the future design developed by the clinicians against the realities of the system that is to be deployed.

In our experience, all of the vendors hold various strengths and weaknesses. The optimize phase should be structured to fully assess the selected vendor's clinical solution and consider it in the context of the organization's needs.

Ideally, the project team will conduct a gap analysis culminating in a workflow redesign plan that outlines the immediate and long-term implications for the selection.

As with the current state FMEA review noted previously, a FMEA review must again be conducted on those same high-impact future processes agreed to by the work teams. The results of these discussions will frequently guide decisions as the organization moves forward with deployment.

Also, these discussions should result in the preparation of a requirements document that clearly outlines the ideal future stipulated by the clinicians and the vendor capabilities for meeting those objectives. Sign-off by both the vendor and the organization is an important outcome of these discussions.

Big bang vs pilot projects

The decision on moving forward with a more incremental, pilot-based

approach versus a “big bang” model is dependent upon a host of factors.

We have seen organizations over the years pursue both of these approaches— some with failure and some with success. We tend to believe that it is advisable for the enterprise to conduct a pilot of the negotiated future design in a selected clinical area. Such an approach allows for the complete evaluation of the optimized model to determine if further modification of the newly designed workflow is required.

Such a process also allows for incremental refinement of the clinical information system infrastructure so that disruption of existing clinical practices is diminished. Choosing a pilot is critical, as the success of the pilot and the ability of the organization to improve based on lessons learned from the pilot will often set the pace for the future success of the clinical implementation.

The assessment-design-optimize approach represents the essential triad of an effective workflow redesign process. It is also the area where organizations too frequently make short-term, financially expedient decisions that ultimately harm the potential success of the initiative.

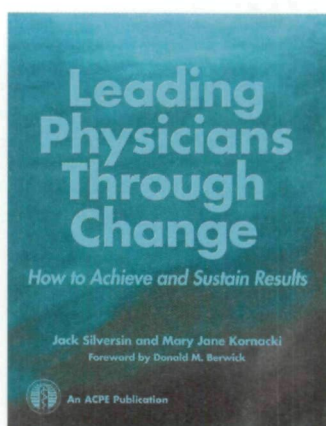
Time and time again, we have seen organizations make decisions to reduce the amount of time involvement of clinicians or bypass the need for assessments only to experience a less-than-optimal result.

We believe that value for the health care organization is driven through an effective focus on the people, process and technology considerations. Workflow redesign is core to this process since it ties together the requirements of the people in the organization with the way work will actually be completed on the backbone of a technology platform.



Leading Physicians Through Change: How to Achieve and Sustain Results

Jack Silversin and Mary Jane Kornacki



185 pages

The authors of this book from ACPE offer a proven technique for overcoming physician resistance and moving an organization forward. The change management framework described in this book is built on theories from social science research and nearly 20 years of consulting to physician organizations around issues of leadership, culture, change implementation, and organizational performance. The book is complemented by more than 20 personal

accounts of successful application of the framework. Each chapter is accompanied by hands-on tools that allow the reader to immediately use the framework to assess an organization's readiness for change.

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